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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,657	03/17/2004	Albert J. DeCoster	ITW7510.083	2656

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ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (ITW)
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EXAMINER	
KERNS, KEVIN P	

ART UNIT	PAPER NUMBER
1793	

NOTIFICATION DATE	DELIVERY MODE
01/11/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/708,657	DECOSTER ET AL.	
	Examiner	Art Unit	
	Kevin P. Kerns	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-40,42-45 and 47-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-40,42-45 and 47-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 22-40, 42-45, and 47-54 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17, 23, and 24 of copending Application No. 10/605,546 (US 2005/0016979) in view of McCormick (US 6,026,682).

The claims of copending Application No. 10/605,546 disclose at least the following structural features within a welding cooling system: a welding torch configured to present an electrode to a weld; an enclosure (welder housing); a power conditioner (power source/supply) disposed within the enclosure; a cooling system having a coolant tank and a spout disposed within the enclosure to circulate coolant through the welding

torch/component via coolant hoses (providing supply and return paths for the coolant); a controller operable to control the cooling system and power conditioner; a means to automatically commence coolant circulation through the torch when the electrode is presented to the weld; a means to maintain coolant circulation until expiration of a specific time period and until a temperature falls below a certain value; a heat exchanger and water pump assembly; and at least one check valve integrated with the cooling system. Copending Application No. 10/605,546 does not specifically disclose a sensing device that is configured to provide a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required.

However, McCormick discloses a coolant safety system for an automated welding apparatus, in which the safety system 10 includes a controller (microprocessor 104 and microprocessor module 157) that is configured to detect connection of a welding component (automated welding gun) to a coolant source (inclusive of coolant supply line 30 and coolant return line 36) via flow rate sensing and control, as well as leak check control from detecting a fault (e.g. leak) and shutting down the flow of liquid coolant via monitoring of the supply and return line sensors, and to permit circulation of coolant through the component upon activation of the welding component (automated welding gun), such that the controller includes pressure sensors 150,152 (column 3, lines 46-67; and Figure 4), pressure flow sensors 100,102 (column 3, lines 1-5 and 34-38; and Figure 4), and a temperature sensor 334 connected to microprocessor 244

(column 9, lines 38-54; and Figure 15) to detect a connection status (including the "shut-off" condition if pressure and/or temperature is/are unacceptable or errant) of the welding component to the coolant supply, including termination of welding if predetermined trip (set) points (i.e. indicates if coolant temperature is too high or too low) that are set for the temperature sensor 334 are reached, such that these features are advantageous for automatically shutting down (deactivating) the flow of coolant in the event of a fault (abstract; column 1, lines 11-14 and 57-67; column 2, lines 1-4 and 43-67; column 3, lines 1-10 and 34-67; column 4, lines 13-32 and 41-67; column 5, lines 1-18 and 45-57; column 8, lines 58-67; column 9, lines 1-19 and 38-59; and Figures 1, 4, 15, and 16).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the welding cooling system disclosed in the claims of copending Application No. 10/605,546, by using the sensing device that is configured to provide a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required, as taught by McCormick, in order to automatically shut down (deactivate) the flow of coolant in the event of a fault (McCormick; abstract; and column 1, lines 11-14 and 57-63).

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 22-39, 43, 47, and 51-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 22-28, 30, 31, 33-38, 43, 47, and 51-54, the phrase "or the like" (in this instance, the term "type") renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like", or "type"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The limitations "welding-type component" (claims 22, 24-26, 28, 30, 31, 34-36, 38, 43, 47, and 51-54), "weld-type area" (claims 22 and 30), "welding-type output" (claims 23 and 32), "welding-type process" (claims 27 and 37), "welding-type power source" (claim 54), "welding-type power" (claim 54), "welding-type work area" (claim 54), and "welding-type power means" (claim 54) include this indefinite term. For example, what defines a "welding-type component", a "weld-type area" etc.?

Importantly, the applicants are additionally referred to the MPEP as follows: MPEP 2173.05(b), under heading E. "Type" (MPEP page 2100-216 of August 2006, Revision 5) states "*The addition of the word "type" to an otherwise definite expression...extends the scope of the expression so as to render it indefinite*". *Ex parte Copenhaver*, 109 USPQ 188 (Bd. App. 1955).

In this instance, it is suggested to delete all instances of the term "type" to overcome the rejections under 35 USC 112, 2nd paragraph.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by McCormick (US 6,026,682).

McCormick discloses a coolant safety system for an automated welding apparatus, in which the safety system 10 includes a controller (microprocessor 104 and microprocessor module 157) that is configured to detect connection of a welding component (automated welding gun) to a coolant source (inclusive of coolant supply line 30 and coolant return line 36) via flow rate sensing and control, as well as leak check control from detecting a fault (e.g. leak) and shutting down the flow of liquid coolant via monitoring of the supply and return line sensors, and to permit circulation of coolant through the component upon activation of the welding component (automated welding gun), such that the controller includes pressure sensors 150,152 (column 3, lines 46-67; and Figure 4), pressure flow sensors 100,102 (column 3, lines 1-5 and 34-38; and Figure 4), and a temperature sensor 334 connected to microprocessor 244 (column 9, lines 38-54; and Figure 15) to detect a connection status (including the "shut-

off" condition if pressure and/or temperature is/are unacceptable or errant) of the welding component to the coolant supply, including termination of welding if predetermined trip (set) points (i.e. indicates if coolant temperature is too high or too low) that are set for the temperature sensor 334 are reached, such that these features are advantageous for automatically shutting down (deactivating) the flow of coolant in the event of a fault (abstract; column 1, lines 11-14 and 57-67; column 2, lines 1-4 and 43-67; column 3, lines 1-10 and 34-67; column 4, lines 13-32 and 41-67; column 5, lines 1-18 and 45-57; column 8, lines 58-67; column 9, lines 1-19 and 38-59; and Figures 1, 4, 15, and 16).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 22-40, 42-45, and 47-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prunier (FR 2 536 320 – complete translation provided in a prior Office Action) in view of McCormick (US 6,026,682).

Prunier discloses an arc welding machine that includes a refrigeration unit for torch cooling, in which the welding machine further includes a welding torch configured to present an electrode to a weld; an enclosure (welder housing) with a base plate, side plates, end plates, and a top cover; a power conditioner (power source/supply) disposed within the enclosure; a cooling system having a coolant tank and a spout disposed within the enclosure to circulate coolant through the welding torch/component via coolant hoses (providing supply and return paths for the coolant); a controller operable to control the cooling system and power conditioner; a means to automatically commence coolant circulation through the torch when the electrode is presented to the weld; a means to maintain and terminate coolant circulation; a heat exchanger and water pump assembly; and at least one check valve integrated with the cooling system (abstract; translated French text of specification and claims in the paragraph bridging pages 3 and 4, the paragraph bridging pages 6 and 7, the detailed description on pages 7-11, the last two paragraphs on page 11 and bridging to page 12, claims 5 and 6; and Figure). Prunier does not specifically disclose a sensing device that is configured to provide a component connection status output indicative of a connection status between

the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required.

However, McCormick discloses a coolant safety system for an automated welding apparatus, in which the safety system 10 includes a controller (microprocessor 104 and microprocessor module 157) that is configured to detect connection of a welding component (automated welding gun) to a coolant source (inclusive of coolant supply line 30 and coolant return line 36) via flow rate sensing and control, as well as leak check control from detecting a fault (e.g. leak) and shutting down the flow of liquid coolant via monitoring of the supply and return line sensors, and to permit circulation of coolant through the component upon activation of the welding component (automated welding gun), such that the controller includes pressure sensors 150,152 (column 3, lines 46-67; and Figure 4), pressure flow sensors 100,102 (column 3, lines 1-5 and 34-38; and Figure 4), and a temperature sensor 334 connected to microprocessor 244 (column 9, lines 38-54; and Figure 15) to detect a connection status (including the "shut-off" condition if pressure and/or temperature is/are unacceptable or errant) of the welding component to the coolant supply, including termination of welding if predetermined trip (set) points (i.e. indicates if coolant temperature is too high or too low) that are set for the temperature sensor 334 are reached, such that these features are advantageous for automatically shutting down (deactivating) the flow of coolant in the event of a fault (abstract; column 1, lines 11-14 and 57-67; column 2, lines 1-4 and 43-67; column 3, lines 1-10 and 34-67; column 4, lines 13-32 and 41-67; column 5, lines

1-18 and 45-57; column 8, lines 58-67; column 9, lines 1-19 and 38-59; and Figures 1, 4, 15, and 16).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the arc welding machine disclosed by Prunier, by using the sensing device that is configured to provide a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required, as taught by McCormick, in order to automatically shut down (deactivate) the flow of coolant in the event of a fault (McCormick; abstract; and column 1, lines 11-14 and 57-63).

10. Claims 22-40, 42-45, and 47-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behnke et al. (US 2,510,207) in view of McCormick (US 6,026,682).

Behnke et al. disclose a fluid control system for inert gas blanketed arc welding, in which the welding machine further includes a welding torch T with a cooling jacket J configured to present an electrode E to a workpiece to be welded W; a power conditioner (power source/supply); a cooling system having a coolant tank (manifold) and a spout operable to circulate coolant through the welding torch/component via coolant hoses (providing supply and return paths for the coolant); a controller operable to control the cooling system and power conditioner; a means to automatically commence coolant circulation through the torch when the electrode is presented to the weld; a means to maintain and terminate coolant circulation; a heat exchanger and

water pump assembly; and at least one check valve integrated with the cooling system (column 1, line 1 through column 3, line 61; and Figure). Behnke et al. do not specifically disclose a sensing device that is configured to provide a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required.

However, McCormick discloses a coolant safety system for an automated welding apparatus, in which the safety system 10 includes a controller (microprocessor 104 and microprocessor module 157) that is configured to detect connection of a welding component (automated welding gun) to a coolant source (inclusive of coolant supply line 30 and coolant return line 36) via flow rate sensing and control, as well as leak check control from detecting a fault (e.g. leak) and shutting down the flow of liquid coolant via monitoring of the supply and return line sensors, and to permit circulation of coolant through the component upon activation of the welding component (automated welding gun), such that the controller includes pressure sensors 150,152 (column 3, lines 46-67; and Figure 4), pressure flow sensors 100,102 (column 3, lines 1-5 and 34-38; and Figure 4), and a temperature sensor 334 connected to microprocessor 244 (column 9, lines 38-54; and Figure 15) to detect a connection status (including the "shut-off" condition if pressure and/or temperature is/are unacceptable or errant) of the welding component to the coolant supply, including termination of welding if predetermined trip (set) points (i.e. indicates if coolant temperature is too high or too low) that are set for the temperature sensor 334 are reached, such that these features

are advantageous for automatically shutting down (deactivating) the flow of coolant in the event of a fault (abstract; column 1, lines 11-14 and 57-67; column 2, lines 1-4 and 43-67; column 3, lines 1-10 and 34-67; column 4, lines 13-32 and 41-67; column 5, lines 1-18 and 45-57; column 8, lines 58-67; column 9, lines 1-19 and 38-59; and Figures 1, 4, 15, and 16).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the arc welding machine disclosed by Behnke et al., by using the sensing device that is configured to provide a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required, as taught by McCormick, in order to automatically shut down (deactivate) the flow of coolant in the event of a fault (McCormick; abstract; and column 1, lines 11-14 and 57-63).

Response to Arguments

11. The examiner acknowledges the applicants' amendment received by the USPTO on October 24, 2007. The amendment overcomes the prior objection to claim 47. The provisional double patenting rejections (in view of copending Application No. 10/605,546) remain, as no terminal disclaimer was submitted by the applicants (see above section 2). The applicants have cancelled claim 46. Claims 22-40, 42-45, and 47-54 are currently under consideration in the application.

12. Applicants' arguments filed October 24, 2007 have been fully considered but they are not persuasive.

With regard to the applicants' remarks/arguments on pages 8-13 of the response, the issues raised in the remarks section are as follows: 1) the provisional double patenting rejections (page 8); 2) the 35 USC 112, 2nd paragraph rejections (pages 8 and 9); 3) the 35 USC 102(b) rejections (pages 9 and 10); and 4) the 35 USC 103(a) rejections (pages 11-13).

Regarding the provisional double patenting rejections, it is first noted that the applicants have not provided a terminal disclaimer in response to these double patenting rejections, nor have the applicants provided any dispute/arguments pertaining to these rejections (see page 8 of remarks). If the applicants continue to lack dispute of the double patenting rejections, a terminal disclaimer will be requested in the future (absent any claim amendments to overcome the double patenting rejections).

Regarding the 35 USC 112, 2nd paragraph rejections, the examiner respectfully disagrees with the applicants' statement that "welding-type does not present an alternative as in using the word "or", in which the applicants believe that "type" and "or the like" are not the same. Although these terms are not the same, they are very similar. Contrary to the applicants' remarks, the term "type" presents many (indefinite) alternatives. As a result, both "type" and "or the like" are similarly inclusive of a wide range of indefinite alternatives. Regarding the applicants' reference to the specification (paragraph [0036], although it is believed that the applicants meant to refer to paragraph [0035]), this citation in the specification only defines "welding-type power" as applying to

heating or cutting systems, but none of the other indefinite terms, including "welding-type component" (claims 22, 24-26, 28, 30, 31, 34-36, 38, 43, 47, and 51-54), "weld-type area" (claims 22 and 30), "welding-type output" (claims 23 and 32), "welding-type process" (claims 27 and 37), "welding-type work area" (claim 54), and "welding-type power means" (claim 54), are presented in the specification. Even when considering the specification in terms of its definition of "welding-type power", the other "welding-type" limitations are not clearly defined and remain indefinite under 35 USC 112, 2nd paragraph.

Regarding the 35 USC 102(b) rejections of claims 51-53, and the 35 USC 103(a) rejections of claims 22-40, 42-45, and 47-54, the applicants chiefly address independent claims 22, 30, 40, 44, 51, and 54.

In addressing the 35 USC 102(b) rejections (pages 9 and 10), the applicants argue (throughout page 10 of the remarks) that McCormick allegedly does not disclose a "controller configured to detect the connection status before any circulation of the coolant through the welding-type component is permitted". Actually, this feature (in quotations) is not specifically what is set forth in independent claim 51. Furthermore, the examiner respectfully disagrees with this argument, as the controller of McCormick necessarily must be configured in this manner, as coolant would otherwise be able to flow in an unconnected status, thus resulting in spillage of coolant. In other words, the microprocessor disclosed by McCormick would certainly be able to detect such a connection status due to its controller with flow and pressure sensors. Even if the applicants believe that McCormick does not expressly disclose these features, it would

be considered as an inherent property and functionality based upon the structural features set forth in the above 35 USC 102(b) rejections.

In addressing the 35 USC 103(a) rejections (pages 11-13), the examiner states in the prior Office Action that Prunier and Behnke et al. do not disclose "a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required". However, the applicants state that the secondary reference (McCormick) allegedly does not teach or suggest the subject matter lacking in both Prunier and Behnke et al. (as discussed by applicants throughout the remainder of the remarks section starting at the bottom of page 11). The examiner respectfully disagrees, as McCormick teaches a coolant safety system for an automated welding apparatus, such that the safety system includes a microprocessor configured to detect flow rate and is operable to shut down the flow of coolant at specific set points (at a predetermined temperature level, or threshold), and would be capable of detecting a connection status at any time with respect to operation of the welding system (also see the above remarks addressing the 35 USC 102(b) rejections). Regarding independent claims 22, 30, 40, 44, and 54, the applicants' arguments rely chiefly on the limitations that related to determining a "detection status" with respect to the welding operation. Although the applicants accurately disclose the teachings of McCormick in the middle paragraph on page 11 of the remarks, it is noted that the microprocessor and control system of the automated welding apparatus of McCormick is capable of detecting a connection status at

predetermined thresholds for the reasons set forth in the above sections. Importantly, with regard to independent claim 30, the new limitation "to receive the component connection status output prior to activation of the welding-type component" is an "intended use" limitation that provides no additional structural feature(s) to the system "apparatus" independent claim 30. Also, the amendment to independent claim 44 has resulted in a combination of the (cancelled) claim 46 limitation into claim 44, and thus claim 44 remains rejected for the same reasons set forth in the 35 USC 103(a) rejections. In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the sensing device that is configured to provide a component connection status output indicative of a connection status between the welding component and coolant supply outlet, in which one or more temperature and/or pressure sensors in cooperation with a dynamic control means would be required, as taught by McCormick, are advantageous in order to automatically shut down (deactivate) the flow of coolant in the event of a fault (McCormick; abstract; and column 1, lines 11-14 and 57-63). As a result, claims 22-40, 42-45, and 47-54 remain rejected.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan Johnson can be reached on (571) 272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns 12/17/07
Primary Examiner
Art Unit 1793

KPK
kpk
December 17, 2007